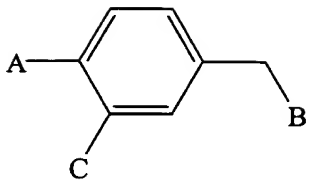
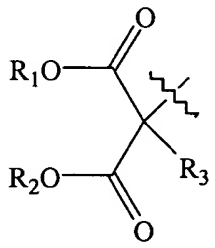


(I),

wherein:

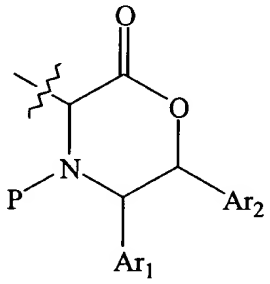
A is carboxyl, carboxyalkyl, dicarboxyalkyl, alkoxycarbonyl, alkoxycarbonylalkyl, dialkoxycarbonylalkyl, or a malonyl group of formula II:



(II),

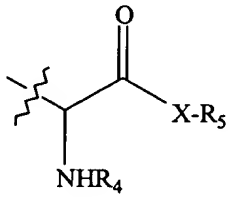
wherein R_1 and R_2 may be the same or different and are selected from the group consisting of hydrogen, alkyl, aryl, arylalkyl, alkylaryl, and heteroaryl; and R_3 is selected from the group consisting of hydrogen, halo, hydroxy, amino, alkyl, aryl, and alkoxy;

B has the formula III:



(III),

wherein P is an amine protecting group; and Ar_1 and Ar_2 are aryl groups; or the formula IV:



(IV),

wherein X is NH or O; R_4 is hydrogen, alkyl, aryl, alkylaryl, arylalkyl, or an amine protective group; and R_5 is selected from the group consisting of hydrogen, alkyl, aryl, arylalkyl, alkylaryl, and heteroaryl; and

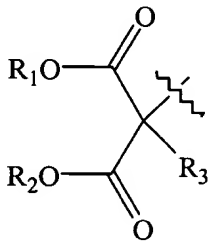
C is selected from the group consisting of hydrogen, hydroxyl, alkyl, alkylcarbonyl, alkylcarbonyloxy, alkoxycarbonyl, and alkoxycarbonyl alkyl;

wherein said aryl, heteroaryl, and the aryl portion of said arylalkyl and alkylaryl may be unsubstituted or substituted with a substituent selected from the group consisting of alkyl, hydroxy, halo, keto, amino, and alkoxy; with the provisos that (i) R_5 is not hydrogen when A is carboxyl or carboxyalkyl, C is hydrogen, B has the formula IV wherein R_4 is hydrogen or alkylcarbonyl, and X is NH; and (ii) R_5 is not hydrogen or alkyl when A is carboxyl or carboxyalkyl, C is hydrogen or hydroxy, B has the formula IV wherein R_4 is hydrogen or alkylcarbonyl, and X is O.

A2

2. (Amended) The compound of claim 1, wherein:

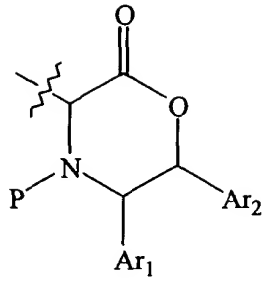
A is carboxyl, carboxyl C_1-C_6 alkyl, dicarboxy C_1-C_6 alkyl, C_1-C_6 alkoxycarbonyl, C_1-C_6 alkoxycarbonyl C_1-C_6 alkyl, C_1-C_6 dialkoxycarbonyl C_1-C_6 alkyl, or a malonyl group of formula II:



(II),

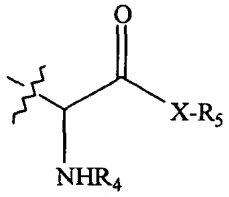
wherein R_1 and R_2 may be the same or different and are selected from the group consisting of hydrogen, C_1-C_6 alkyl, aryl, aryl C_1-C_6 alkyl, C_1-C_6 alkylaryl, and heteroaryl; and R_3 is selected from the group consisting of hydrogen, halo, hydroxy, amino, C_1-C_6 alkyl, aryl, and C_1-C_6 alkoxy;

B has the formula III:



(III),

A2 wherein P is an amine protecting group; and Ar_1 and Ar_2 are aryl groups; or B has the formula IV:



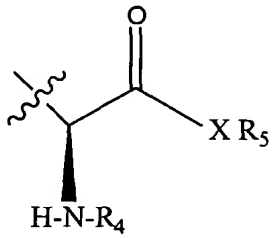
(IV),

wherein X is NH or O; R_4 is hydrogen, C_1-C_6 alkyl, aryl, C_1-C_6 alkylaryl, aryl C_1-C_6 alkyl, or an amine protecting group; and R_5 is selected from the group consisting of hydrogen, C_1-C_6 alkyl, aryl, aryl C_1-C_6 alkyl, C_1-C_6 alkylaryl, and heteroaryl; and

C is selected from the group consisting of hydrogen, hydroxyl, C_1-C_6 alkyl, C_1-C_6 alkylcarbonyl, C_1-C_6 alkylcarbonyloxy, C_1-C_6 alkoxycarbonyl, and C_1-C_6 alkoxycarbonyl C_1-C_6 alkyl; wherein said aryl, heteroaryl, and the aryl portion of said arylalkyl and alkylaryl may be unsubstituted or substituted with a substituent selected from the group consisting of C_1-C_6 alkyl, hydroxy, halo, keto, amino, and C_1-C_6 alkoxy.

4. (Amended) The compound of claim 3, wherein B has the formula:

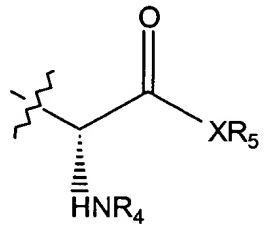
A3



wherein X is NH or O; R_4 is hydrogen, C_1-C_6 alkyl, aryl, C_1-C_6 alkylaryl, aryl C_1-C_6 alkyl, or an amine protecting group; and R_5 is selected from the group consisting of hydrogen, C_1-C_6 alkyl, aryl, aryl C_1-C_6 alkyl, C_1-C_6 alkylaryl, and heteroaryl.

5. (Amended) The compound of claim 3, wherein B has the formula:

A3



wherein X is NH or O; R_4 is hydrogen, C_1-C_6 alkyl, aryl, C_1-C_6 alkylaryl, aryl C_1-C_6 alkyl, or an amine protecting group; and R_5 is selected from the group consisting of hydrogen, C_1-C_6 alkyl, aryl, aryl C_1-C_6 alkyl, C_1-C_6 alkylaryl, and heteroaryl.

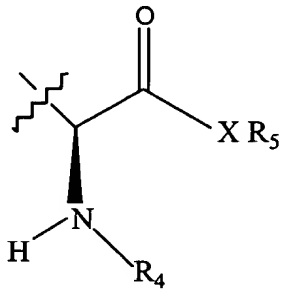
6. (Amended) The compound of claim 4, wherein X is O.

A4

9. (Amended) The compound of claim 8, wherein the amine protecting group is selected from the group consisting of fluorenylmethoxycarbonyl, tert-butoxycarbonyl, carbobenzoxy, and carbamoyl.

24. (Amended) The compound of claim 1, wherein R_1 and R_2 are tert-butyl, R_3 is hydrogen, and B has the formula

A5



wherein X is O, R_4 is fluorenylmethoxycarbonyl, and R_5 is hydrogen.

A6 34. (Amended) A conjugate comprising a conjugant covalently linked to a compound of claim 1.

A7 44. (Amended) The compound of claim 41, wherein E is hydrogen.

A8 46. (Amended) The compound of claim 41, wherein R_3, R_4, R_5, and R_6 are hydrogen.

A9 48. (Amended) The compound of claim 38, wherein W is selected from the group consisting of C_1-C_6 alkylcarbonyl, oxalyl, C_1-C_6 alkylaminooxalyl, arylaminooxalyl, aryl C_1-C_6 alkylaminooxalyl, C_1-C_6 alkoxyoxalyl, carboxy C_1-C_6 alkyl carbonyl, heterocyclyl carbonyl, heterocyclyl C_1-C_6 alkyl carbonyl, aryl C_1-C_6 alkyl heterocyclyl C_1-C_6 alkyl carbonyl, aryloxycarbonyl, and aryl C_1-C_6 alkoxycarbonyl, wherein the aryl and alkyl portions of the substituents may be unsubstituted or substituted with a substituent selected from the group consisting of halo, hydroxy, carboxyl, amino, amino C_1-C_6 alkyl, C_1-C_6 alkyl, C_1-C_6 alkoxy, and keto; and the heterocyclyl portion of W contains at least 4 hetero atoms selected from the group consisting of O, N, and S.

A10 66. (Amended) The compound of claim 38, wherein Z is aryl C_1-C_6 alkylamino.

A11 71. (Amended) The compound of claim 38, wherein Z is aryl heterocyclyl C_1-C_6 alkylamino.

A12 77. (Amended) The compound of claim 38, wherein said amino acid is selected from the group consisting of glycine, alanine, valine, norvaline, leucine, iso-leucine, norleucine, α-amino n-decanoic acid, serine, homoserine, threonine, methionine, cysteine, S-acetylaminomethyl-cysteine, proline, trans-3- and trans-4-hydroxyproline, phenylalanine, tyrosine, 4-aminophenylalanine, 4- nitrophenylalanine, 4-chlorophenylalanine, 4-carboxyphenylalanine, β-phenylserine β-hydroxyphenylalanine, phenylglycine, α-naphthylalanine, cyclohexylalanine, cyclohexylglycine, tryptophan, indoline-2-carboxylic acid, 1,2,3,4-tetrahydroisoquinoline-3-carboxylic acid, aspartic acid, asparagine, aminomalonic acid, aminomalonic acid monoamide, glutamic acid, glutamine, histidine, arginine, lysine, N'-benzyl-N'-methyl-lysine, N',N'-dibenzyl-lysine, 6-hydroxylysine, ornithine, α-aminocyclopentane carboxylic acid, α-aminocyclohexane carboxylic acid, α-aminocycloheptane carboxylic acid, α-(2-amino-2-norbornane)-carboxylic acid, α,γ-

A12

diaminobutyric acid, α,β-diaminopropionic acid, homophenylalanine, and α-tert-butylglycine.

A13

84. (Amended) A composition comprising a pharmacologically acceptable carrier and a compound of claim 38.

85. (Amended) A method for inhibiting an SH2 domain from binding with a phosphoprotein comprising contacting an SH2 domain with a compound of claim 38.

90. (Amended) A method for inhibiting SH2 domain binding comprising exposing a material containing an SH2 domain to a compound of claim 38.

A14

91. (Amended) A method for determining the presence of an SH2 domain in a material comprising:
(a) exposing a sample of said material to a SH2 binding compound and obtaining a first binding result;
(b) exposing another sample of said material to a compound of claim 38 and obtaining a second binding result; and
(c) comparing the first and second binding results to determine whether an SH2 domain is present in the material.

92. (Amended) A method of preventing or treating a disease, state, or condition in a mammal comprising administering a compound of claim 38.

A15

106. (Amended) A method of enhancing the therapeutic effect of a treatment rendered to a mammal that has been afflicted with a disease, state, or condition, comprising administering to the mammal a compound of claim 38 in conjunction with the treatment.

A16

112. (Amended) A method of inhibiting the MAP kinase activity in a mammal comprising administering to the mammal a compound of claim 38.

Add the following claims:

R-126

116 ~~115~~. (New) A compound of the formula:

$$W\text{-}Y\text{-}(AA)_n\text{-}Z$$

A17

wherein n is 0 to 15;

Y is a phenylalanyl radical having a phenyl ring, an amine end, and a carboxyl end, the phenyl ring having (i) dicarboxy C_1-C_6 alkyl , (ii) hydroxyl and carboxy C_1-C_6 alkyl, (iii) carboxyl and carboxy C_1-C_6 alkyl, or (iv) dicarboxyhalo C_1-C_6 alkyl, or dicarboxyhalo C_1-C_6 alkyloxy; or an ester of (i), (ii), (iii), or (iv); wherein the alkyl portion of the substituents may be unsubstituted or substituted with a substituent selected from the group consisting of halo, hydroxy, carboxyl, amino, aminoalkyl, C_1-C_6 alkyl, C_1-C_6 alkoxy, and keto;

W is a moiety attached to the nitrogen of Y and is selected from the group consisting of C_1-C_6 alkylcarbonyl, oxalyl, C_1-C_6 alkylaminooxalyl, arylaminooxalyl, aryl C_1-C_6 alkylaminooxalyl, C_1-C_6 alkoxyoxalyl, carboxy C_1-C_6 alkyl carbonyl, heterocyclyl carbonyl, heterocyclyl C_1-C_6 alkyl carbonyl, aryl C_1-C_6 alkyl heterocyclyl C_1-C_6 alkyl carbonyl, aryloxycarbonyl, and aryl C_1-C_6 alkoxycarbonyl, wherein the aryl and alkyl portions of the substituents may be unsubstituted or substituted with a substituent selected from the group consisting of halo, hydroxy, carboxyl, amino, amino C_1-C_6 alkyl, C_1-C_6 alkyl, C_1-C_6 alkoxy, and keto; and the heterocyclyl portion of W contains at least 4 hetero atoms selected from the group consisting of O, N, and S;

AA is an amino acid, the amine end of which is attached to the carboxyl end of Y; and

Z is an aryl C_1-C_6 alkylamino or arylheterocyclyl C_1-C_6 alkylamino;

or a salt thereof.

A17

117

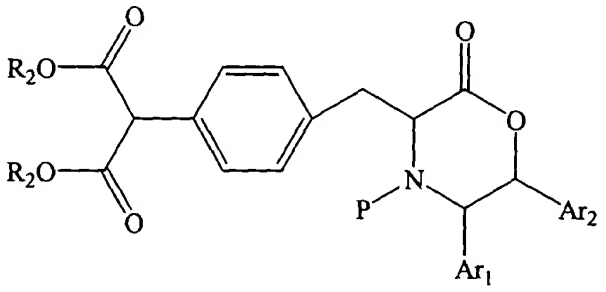
~~116~~. (New) A composition comprising a pharmacologically acceptable carrier and a compound of claim 115.

118

~~117~~. (New) A method for inhibiting an SH2 domain from binding with a phosphoprotein comprising contacting an SH2 domain with a compound of claim 115.

119

~~118~~. (New) A process for the preparation of a compound of formula VII:



(VII),

wherein R_2 is alkyl, P is an amine protecting group, and Ar_1 and Ar_2 are aryl; the process comprising:

(a) converting a p-halotoluene to a p-tolyl-malonic acid dialkyl ester by contacting the p-halotoluene with a dialkylmalonate and a cuprous halide;

(b) halogenating the p-tolyl-malonic acid dialkyl ester to obtain a (4-halomethylphenyl)-malonic acid dialkyl ester; and

(c) contacting the (4-halomethylphenyl)-malonic acid ester with a benzyl-6-oxo-2,3-diaryl-4-morpholine to obtain the compound of formula VII.